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Application Number	10/759,899
Filing Date	January 16, 2004
First Named Inventor	Qiang Luo
Art Unit	2621
Examiner Name	Not Yet Assigned
Attorney Docket Number	89039PCW

**I hereby revoke all previous powers of attorney given in the above-identified application.**

☐ A Power of Attorney is submitted herewith.

**OR**

☒ I hereby appoint the practitioners associated with the Customer Number:

01333

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☒ The address associated with  
Customer Number:

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**I am the:**

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

**SIGNATURE of Applicant or Assignee of Record**

Signature

Name

Peyton C. Watkins, Esq.

Date

January 6, 2005

Telephone

(585) 477-8282

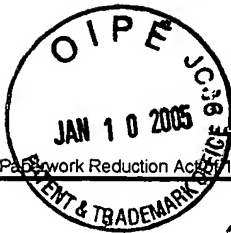
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: EASTMAN KODAK COMPANYApplication No./Patent No.: 10/759,899 Filed/Issue Date: January 16, 2004Entitled: HIGH PHOTSENSITIVITY CMOS IMAGE SENSOR PIXEL ARCHITECTUREEASTMAN KODAK COMPANY, a DELAWARE CORPORATION

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
\_\_\_\_\_  
Signature

January 6, 2005

Date

Peyton C. Watkins, Esq.

(585) 477-8282

Printed or Typed Name

Telephone Number


Authorized Signer for Assignee

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Tab settings → → → t t t t t t t t					
1. Name of conveying party(ies): NATIONAL SEMICONDUCTOR CORPORATION					
2. Name and address of receiving party(ies):  Name: EASTMAN KODAK COMPANY City: Rochester State: New York Zip: 14650					
3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Other:					
Execution Date: August 18, 2004					
4. Application number(s) or patent number(s): SEE "APPENDIX A" <small>If this document is being filed together with a new application, the execution date of the application is the same as the execution date of the Assignment, unless stated as follows:</small>					
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Cathy M. Dasso Address: Eastman Kodak Company, Patent Legal Staff City: Rochester State: New York Zip: 14650-2201					
6. The total number of applications and patents involved is one (1) unless stated as follows: 28					
7. Total fee (37 CFR 1.21h): \$1120 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account					
8. Deposit account number: 05-0225 <small>(Attach duplicate copy of this page if paying by deposit account)</small> <b>DO NOT USE THIS SPACE</b>					
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>					
Cathy M. Dasso Name of Person Signing		 Signature		November 11, 2004 Date	
Total number of pages including cover sheet:					5

ASSIGNMENT OF INVENTION

THIS Assignment is effective the 18 day of August, 2004,

BETWEEN **NATIONAL SEMICONDUCTOR CORPORATION**, of 2900 Semiconductor Drive, Santa Clara, California 95051, USA, a corporation of the State of Delaware (hereinafter the "Assignor"), who is the owner of the entire title in the United States applications set forth in Appendix A and in the inventions covered by said applications; and

**EASTMAN KODAK COMPANY**, of 343 State Street, Rochester, New York 14650, USA, a corporation of the State of New Jersey (hereinafter the "Assignee"), who wants to acquire the entire title of Assignor in the aforesaid applications and the inventions covered thereby.

THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor does hereby assign unto Assignee its entire title in and to said inventions covered by said applications, and all corresponding applications and patent applications in countries other than the United States, and all reissues, divisions and extensions thereof and to any Letters Patent which have or may issue based thereon, all of which are encompassed herein by the term "Applications", including all claims for damage for past infringement thereof; the same to be held and enjoyed by Assignee, its successors, and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor had this assignment and sale not been made.

Assignor also agrees that it will, at Assignee's request, render such lawful cooperation and assistance as may be necessary for the proper maintenance and enforcement of said applications, provided, however, that Assignor may condition its compliance with such a request on Assignee's agreement to pay Assignor reasonable out-of-pocket expenses in connection therewith.

This document shall be construed, interpreted and applied in accordance with the laws of the State of New York.

IN WITNESS THEREOF, the parties have caused their respective corporate names to be affixed hereto and this instrument to be signed by their duly authorized officers as of the day and year written below.

Signed this 2nd day of November, 2004.

National Semiconductor Corporation

By [Signature]

John M. Clark

Senior Vice President, General Counsel and Secretary

Witnessed by: [Signature]

Signed this 10 day of November, 2004,

Eastman Kodak Company

By [Signature]

Willy C. Shih

President Display & Components

Senior Vice President, Eastman Kodak Company

Witnessed by: [Signature]

## ASSIGNED PATENTS

NOTE: ALL PATENTS / APPLICATIONS UNITED STATES UNLESS OTHERWISE INDICATED

Docket #	Title	Inventors	Application No.	Patent No.
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89008	LOW COST DIE SIZED MODULE FOR IMAGING APPLICATION	<ul style="list-style-type: none"> <li>• TAKIAR HEM</li> <li>• PARBHU ASHOK</li> <li>• NGUYEN LUU</li> </ul>	09/618,747	
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89012	PIXEL PROCESSING SYSTEM FOR IMAGE SCANNING APPLICATIONS	<ul style="list-style-type: none"> <li>• BOISVERT DAVID MICHAEL</li> <li>• CLARK JOSEPH D</li> <li>• LEBOEUF ROBERT</li> <li>• MAIGRET MICHAEL</li> <li>• MCMAHON ANDREW</li> </ul>	09/957,946	
89013	HIGH VOLTAGE RESET METHOD FOR INCREASING THE DYNAMIC RANGE OF A CMOS IMAGE SENSOR	<ul style="list-style-type: none"> <li>• GUPTA SHIVANI</li> <li>• KINDT WILKO (WILLEM)</li> <li>• PHAN CHRISTINA</li> </ul>	09/939,217	

## ASSIGNED PATENTS

Docket #	Title	Inventors	Application No.	Patent No.
89015	PIXEL BINNING IMAGE SENSOR	<ul style="list-style-type: none"> <li>KINDT WILKO (WILLEM)</li> <li>SEGERSTEDT BRIAN</li> </ul>	10/098,235	
89017	AUTOMATIC EXPOSURE CONTROL FOR AN IMAGE SENSOR	<ul style="list-style-type: none"> <li>KINDT WILKO (WILLEM)</li> <li>LEE BUMHA</li> </ul>	10/115,650	
89025	AUTOMATICALLY BALANCED EXPOSURE TIME AND GAIN IN AN IMAGE SENSOR	<ul style="list-style-type: none"> <li>KINDT WILKO (WILLEM)</li> </ul>	10/255,252	
89026	APPARATUS AND METHOD FOR WAFER LEVEL PACKAGING OF OPTICAL IMAGING SEMICONDUCTOR DRIVES	<ul style="list-style-type: none"> <li>LEE SHAW WEI</li> <li>PRABHU ASHOK</li> </ul>	10/150,275	
89027	APPARATUS AND METHOD FOR WAFER LEVEL PACKAGING OF OPTICAL IMAGING SEMICONDUCTOR DRIVES	<ul style="list-style-type: none"> <li>LEE SHAW WEI</li> <li>PRABHU ASHOK</li> </ul>	10/217,341	
89028	BLOOMING CONTROL FOR A CMOS IMAGE SENSOR	<ul style="list-style-type: none"> <li>PHAN CHRISTINA</li> </ul>	10/273,956	
89029	BLACK LEVEL CALIBRATION METHOD IN IMAGER WITH HYSTERESIS COMPARISON AND ADAPTIVE STEP SIZE	<ul style="list-style-type: none"> <li>LEE BUMHA</li> <li>MCMAHON ANDREW</li> </ul>	10/290,782	
89030	COLOR IMAGER CELL WITH TRANSISTORS FORMED UNDER THE PHOTODIODES	<ul style="list-style-type: none"> <li>REDA RAZOUK</li> </ul>	10/340165	
89032	COLUMN LEVEL CHARGE AMPLIFIER	<ul style="list-style-type: none"> <li>SEGERSTEDT BRIAN</li> <li>KINDT WILKO (WILLEM)</li> </ul>	10/353,614	
89033	CMOS IMAGE SENSOR OVERSATURATION PROTECTION CIRCUIT	<ul style="list-style-type: none"> <li>LEE BUMHA</li> <li>PHAN CHRISTINA</li> </ul>	10/607,943	
89035	ADAPTIVE SETTING OF WAVELET SUB-BAND THRESHOLDS FOR LOW-LIGHT IMAGE DENOISING	<ul style="list-style-type: none"> <li>HATIPOGLU SERKAN</li> </ul>	10/644,586	
89037	BI-DIRECTIONAL HORIZONTAL SCAN CIRCUIT WITH SUB-SAMPLING AND HORIZONTAL ADDING FUNCTIONS	<ul style="list-style-type: none"> <li>LUO QIANG</li> </ul>	10/641,605	
89038	CHARGE DIFFUSION CROSSTALK REDUCTION FOR IMAGE SENSORS	<ul style="list-style-type: none"> <li>LUO QIANG</li> </ul>	10/688,657	
89039	HIGH PHOTSENSITIVITY CMOS IMAGE SENSOR PIXEL ARCHITECTURE	<ul style="list-style-type: none"> <li>KINDT WILKO (WILLEM)</li> <li>LUO QIANG</li> <li>PHAN CHRISTINA</li> </ul>	10/759,899	
89041	IMAGER DIODE WITH SIDEWALL PASSIVATION	<ul style="list-style-type: none"> <li>HOPPER PETER</li> <li>DRURY ROBERT</li> <li>MIRGORODSKI YURI</li> <li>VASHCHENKO VLADISLAV</li> </ul>	10/698,647	
89042	COLOR IMAGER AND LOW-COST METHOD OF FORMING THE IMAGER	<ul style="list-style-type: none"> <li>HOPPER PETER</li> <li>DRURY ROBERT</li> <li>LINDORFER PHILIPP</li> <li>VASHCHENKO VLADISLAV</li> </ul>	10/728,612	
89043	SYSTEM AND METHOD FOR LOW-COST PROGRAMMABLE IMAGE RESIZING	<ul style="list-style-type: none"> <li>SHARMA ANIL</li> <li>SHARMA CHANDAN</li> </ul>	10/803,483	

## ASSIGNED PATENTS

Docket #	Title	Inventors	Application No.	Patent No.
89044	LOW DARK CURRENT CMOS IMAGE SENSOR PIXEL HAVING A PHOTODIODE ISOLATED FROM FIELD OXIDE	<ul style="list-style-type: none"> <li>• LUO QIANG</li> </ul>	10/786,846	
89045	IMAGING CELL WITH A NON-VOLATILE MEMORY THAT PROVIDES A LONG INTEGRATION PERIOD AND METHOD OF OPERATING THE IMAGING CELL	<ul style="list-style-type: none"> <li>• HOPPER PETER</li> <li>• GREIG WENDY</li> <li>• LINDORFER PHILIPP</li> <li>• VASHCHENKO VLADISLAV</li> </ul>	10/821,391	
89046	IMAGING CELL THAT HAS A LONG INTEGRATION PERIOD AND METHOD OF OPERATING THE IMAGING CELL	<ul style="list-style-type: none"> <li>• HOPPER PETER</li> <li>• GREIG WENDY</li> <li>• LINDORFER PHILIPP</li> <li>• VASHCHENKO VLADISLAV</li> </ul>	10/821,286	
89047	METHOD FOR ACHIEVING LOW DARK CURRENT, LOW BAD PIXELS CMOS IMAGE SENSOR WITH STANDARD DEEP SUBMICRON CMOS LOGIC PROCESS	<ul style="list-style-type: none"> <li>• KWONG EDITH</li> <li>• LUO QIANG</li> <li>• PHAN CHRISTINA</li> <li>• STATON ERIC</li> <li>• THOR CARON</li> </ul>	10/853,806	
89048	METHOD AND APPARATUS FOR MEASURING IMAGE LAG IN CMOS IMAGE SENSOR SYSTEMS	<ul style="list-style-type: none"> <li>• LUO QIANG</li> <li>• THOR CARON</li> </ul>	10/835,889	
89049	A NOVEL HIGH SENSITIVITY IMAGER DIODE WITH INTEGRAL GAIN	<ul style="list-style-type: none"> <li>• HOPPER PETER</li> <li>• HWANG KYUWOON</li> <li>• LINDORFER PHILIPP</li> <li>• VASHCHENKO VLADISLAV</li> </ul>	10/854,079	
89050	METHOD TO CHARACTERISE ELECTRICAL CROSS TALK OF COLOR SOLID-STATE IMAGE SENSORS	<ul style="list-style-type: none"> <li>• LUO QIANG</li> </ul>	10/854,056	
89051	AN IMAGING CELL WITH ENHANCED SENSITIVITY	<ul style="list-style-type: none"> <li>• HOPPER PETER</li> <li>• MIRGORODSKI YURI</li> <li>• LINDORFER PHILIPP</li> <li>• POULTER MARK</li> </ul>	10/863,058	

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